EP_1 Receptor Variant EP_1 VAR-1

ATGagccctt gcgggcccct caacctgagc ctggcgggcg aggcgaccac atgcgcggcg 61
ccctgggtcc ccaacacgtc ggccgtgccg ccgtcgggcg cttcgcccgc gctgcccatc 121
ttctccatga cgctgggcgc cgtgtccaac ctgctggcgc tggcgctgct ggcgcaggcc 181
gcgggccgcc tgcgacgccg ccgctcggcc accaccttcc tgctgttcgt ggccagcctg 241
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gcggggcgcg ctccggccgg cggggcctgc cacttcctgg gcggctgcat ggtcttcttc 361
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1201
cccgaaagcc agcatcgcct tctccatctg acctcccatc cttcctcc**TA G**ccccctct
1261

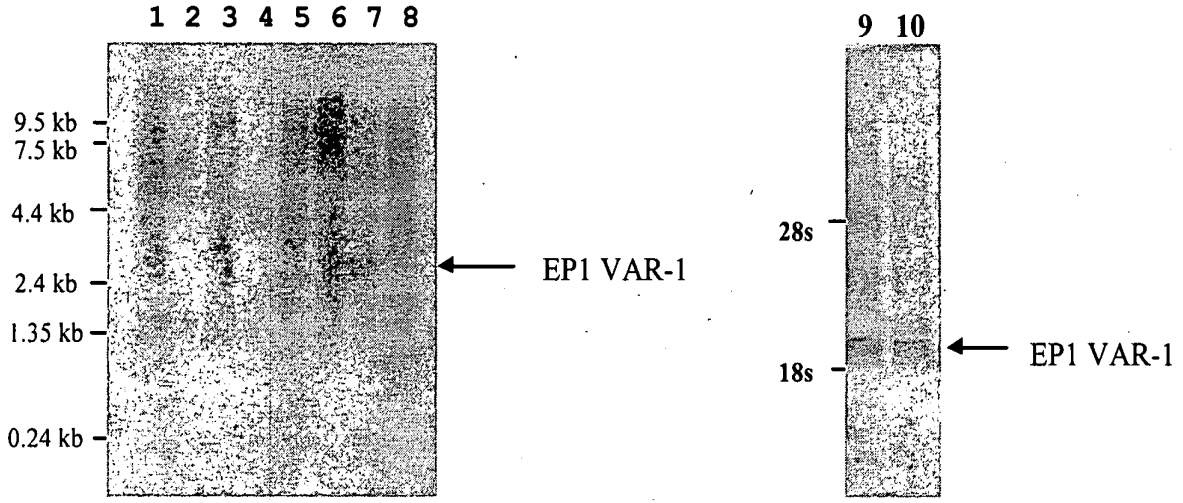
FIGURE 1

Comparison of Deduced Amino Acid Sequences of Human EP1 And EP1 VAR-1

```
MSPCGPLNLSLAGEATTCAAPWVPNTSAVPPSGASPALPIFSMT    WT EP1
MSPCGPLNLSLAGEATTCAAPWVPNTSAVPPSGASPALPIFSMT    EP1 VAR-1

LGAVSNLLALALLAQAAGRLRRRRSATTFLLFVASLLATDLAGH
LGAVSNLLALALLAQAAGRLRRRRSAATFLLFVASLLATDLAGH

VIPGALVLRLYTAGRAPAGGACHFLGGCMVFFGLCPLLLGCGMA
VIPGALVLRLYTAGRAPAGGACHFLGGCMVFFGLCPLLLGCGMA

VERCVGVTRPLLHAARVSVARARLALAAVAAVALAVALLPLARV
VERCVGVTRPLLHAARVSVARARLALAAVAAVALAVALLPLARV

GRYELQYPGTWCFIGLGPPGGWRQALLAGLFASLGLVALLAALV
GRYELQYPGTWCFIGLGPPGGWRQALLAGLFASLGLVALLAALV

CNTLSGLALHRARWRRRSRRPPPASGPDSRRRWGAHGPRSASAS
CNTLSGLALLRARWRRRSRRPPPASGPDSRRRWGAHGPRSASAS

SASSIASASTFFGGSRSSGSARRARAHDVEMVGQLVGIMVVSCI
SASSIASASTFFGGSRSSGSARRARAHDVEMVGQLVGIMVVSCI
        ⬇
CWSPMLVLVALAVGGWSSTSLQRPLFLAVRLASWNQILDPWVYI
CWSPMLV RGAPAPRATLLPAPSRHPPALCRPRTPGASILDSTKA

LLRQAVLRQLLRLLPPRAGAKGGPAGLGLTPSAWEASSLRSSRHSGLSHF
PAPRGPTCPESQHRLLHLTSHPSS
```

Figure 2

Multiple Tissue Northern Blot Analysis Of Human EP1 VAR-1 Receptor



1. Heart
2. Brain
3. Placenta
4. Lung
5. Liver
6. Skeletal Muscle
7. Kidney
8. Pancreas
9. Ciliary SM 1
10. Ciliary SM 2

Figure 3

Title: HUMAN PROSTAGLANDIN EP, RECEPTOR VARIANTS AND METHODS OF USING SAME
Inventors: Liang and Woodward
Filing Date: Herewith
Attorney Client-Matter No.: 66872-031 (P-AR 5749)

Hydropathic Analysis of EP_1 Receptor Variant EP_1 VAR-1

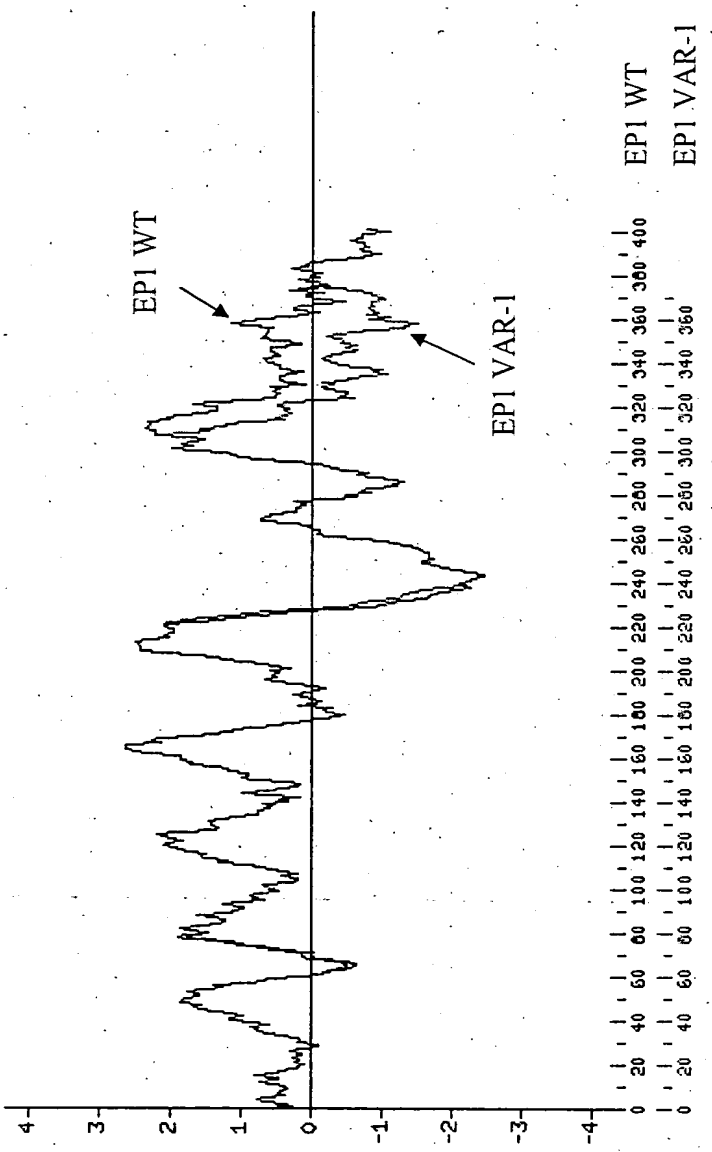


Figure 4

Genomic Structure of Human EP1 and EP1 VAR-1

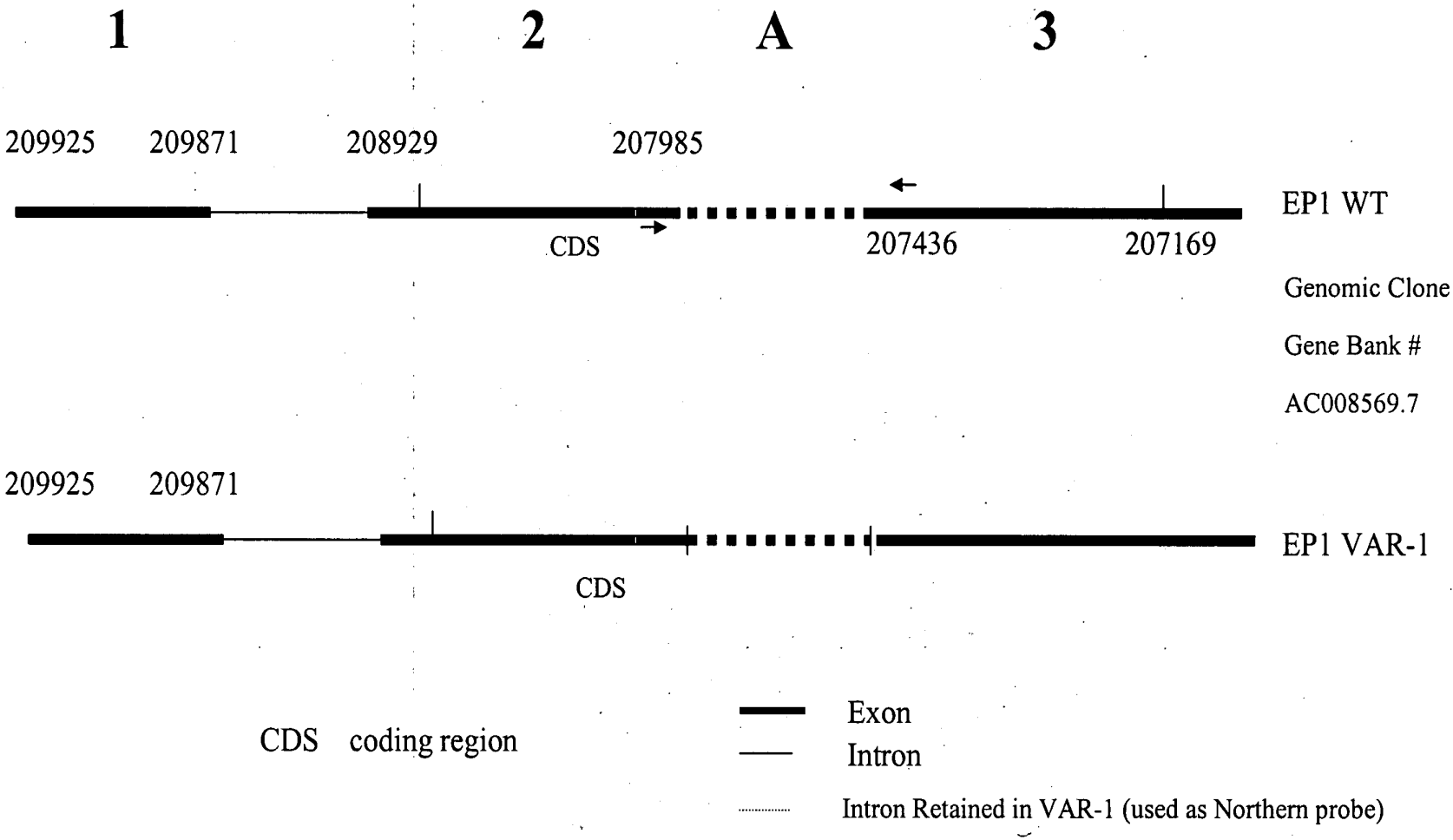


Figure 5

Title: HUMAN PROSTAGLANDIN EP1 RECEPTOR VARIANTS AND METHODS OF USING SAME
Inventors: Liang and Woodward
Filing Date: Herewith
Attorney Client-Matter No.: 66872-031 (P-AR 5749)